RAW SEQUENCE LISTING   DATE: 09/17/2004
PATENT APPLICATION: **US/10/656,531B** TIME: 15:49:44

  Input Set : **A:\CTCH-P01-016 SUB SEQ.TXT**
  Output Set: **N:\CRF4\09172004\J656531B.raw**

```
 4 <110> APPLICANT: Baltimore, David
 5         Porteus, Matthew
 7 <120> TITLE OF INVENTION: USE OF CHIMERIC NUCLEASES TO STIMULATE
 8         GENE TARGETING
10 <130> FILE REFERENCE: CTCH-P01-016
12 <140> CURRENT APPLICATION NUMBER: 10/656,531B
13 <141> CURRENT FILING DATE: 2003-09-05
15 <150> PRIOR APPLICATION NUMBER: 60/408,454
16 <151> PRIOR FILING DATE: 2002-09-05
18 <150> PRIOR APPLICATION NUMBER: 60/484,788
19 <151> PRIOR FILING DATE: 2003-07-03
21 <150> PRIOR APPLICATION NUMBER: 60/419,341
22 <151> PRIOR FILING DATE: 2002-10-17
24 <160> NUMBER OF SEQ ID NOS: 52
26 <170> SOFTWARE: FastSEQ for Windows Version 4.0
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 18
30 <212> TYPE: DNA
31 <213> ORGANISM: Unknown
33 <220> FEATURE:
34 <223> OTHER INFORMATION: Oligonucleotide
36 <400> SEQUENCE: 1
37 tagggataac agggtaat                                    18
39 <210> SEQ ID NO: 2
40 <211> LENGTH: 9
41 <212> TYPE: DNA
42 <213> ORGANISM: Unknown
44 <220> FEATURE:
45 <223> OTHER INFORMATION: Oligonucleotide
47 <400> SEQUENCE: 2
48 ggggaagaa                                               9
50 <210> SEQ ID NO: 3
51 <211> LENGTH: 9
52 <212> TYPE: DNA
53 <213> ORGANISM: Unknown
55 <220> FEATURE:
56 <223> OTHER INFORMATION: Oligonucleotide
58 <400> SEQUENCE: 3
59 gcgtggtcg                                               9
61 <210> SEQ ID NO: 4
62 <211> LENGTH: 9
63 <212> TYPE: DNA
64 <213> ORGANISM: Unknown
```

RAW SEQUENCE LISTING   DATE: 09/17/2004
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Input Set : **A:\CTCH-P01-016 SUB SEQ.TXT**
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```
      66 <220> FEATURE:
      67 <223> OTHER INFORMATION: Oligonucleotide
      69 <400> SEQUENCE: 4
      70 gatgttgct                                                  9
      72 <210> SEQ ID NO: 5
      73 <211> LENGTH: 15
      74 <212> TYPE: DNA
      75 <213> ORGANISM: Unknown
      77 <220> FEATURE:
      78 <223> OTHER INFORMATION: Oligonucleotide
W-->  80 <221> NAME/KEY: misc_feature
      81 <222> LOCATION: (5)...(10)
      82 <223> OTHER INFORMATION: n = A,T,C or G
W-->  84 <400> 5
W-->  85 gatgnnnnnn ttgct                                          15
      87 <210> SEQ ID NO: 6
      88 <211> LENGTH: 9
      89 <212> TYPE: DNA
      90 <213> ORGANISM: Unknown
      92 <220> FEATURE:
      93 <223> OTHER INFORMATION: Oligonucleotide
W-->  95 <221> NAME/KEY: misc_feature
      96 <222> LOCATION: 2,3,5,6,8,9
      97 <223> OTHER INFORMATION: n = A,T,C or G
W-->  99 <400> 6
W--> 100 gnngnngnn                                                  9
     102 <210> SEQ ID NO: 7
     103 <211> LENGTH: 24
     104 <212> TYPE: DNA
     105 <213> ORGANISM: Homo sapiens
     107 <220> FEATURE:
     108 <221> NAME/KEY: misc_feature
     109 <222> LOCATION: 1,2,4,5,7,8
     110 <223> OTHER INFORMATION: n = A,T,C or G
     112 <221> NAME/KEY: misc_feature
     113 <222> LOCATION: (10)...(15)
     114 <223> OTHER INFORMATION: n= A,T,C or G
W--> 116 <221> misc_feature
     117 <222> LOCATION: 17,18,20,21,23,24
     118 <223> OTHER INFORMATION: n=A,T,C or G
W--> 120 <400> 7
W--> 121 nncnncnncn nnnnngnngn ngnn                                24
     123 <210> SEQ ID NO: 8
     124 <211> LENGTH: 9
     125 <212> TYPE: DNA
     126 <213> ORGANISM: Unknown
     128 <220> FEATURE:
     129 <223> OTHER INFORMATION: Oligonucleotide
     131 <400> SEQUENCE: 8
```

RAW SEQUENCE LISTING   DATE: 09/17/2004
PATENT APPLICATION: US/10/656,531B   TIME: 15:49:44

Input Set : A:\CTCH-P01-016 SUB SEQ.TXT
Output Set: N:\CRF4\09172004\J656531B.raw

```
132 ggggaagaa                                              9
134 <210> SEQ ID NO: 9
135 <211> LENGTH: 8
136 <212> TYPE: DNA
137 <213> ORGANISM: Unknown
139 <220> FEATURE:
140 <223> OTHER INFORMATION: Oligonucleotide
142 <400> SEQUENCE: 9
143 gcgtggcg                                               8
145 <210> SEQ ID NO: 10
146 <211> LENGTH: 24
147 <212> TYPE: DNA
148 <213> ORGANISM: Unknown
150 <220> FEATURE:
151 <223> OTHER INFORMATION: Oligonucleotide
153 <400> SEQUENCE: 10
154 accatcttct tcaaggacga cggc                            24
156 <210> SEQ ID NO: 11
157 <211> LENGTH: 9
158 <212> TYPE: DNA
159 <213> ORGANISM: Unknown
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Oligonucleotide
164 <400> SEQUENCE: 11
165 gaagatggt                                              9
167 <210> SEQ ID NO: 12
168 <211> LENGTH: 9
169 <212> TYPE: DNA
170 <213> ORGANISM: Unknown
172 <220> FEATURE:
173 <223> OTHER INFORMATION: Oligonucleotide
175 <400> SEQUENCE: 12
176 gacgacggc                                              9
178 <210> SEQ ID NO: 13
179 <211> LENGTH: 24
180 <212> TYPE: DNA
181 <213> ORGANISM: Unknown
183 <220> FEATURE:
184 <223> OTHER INFORMATION: Oligonucleotide
186 <400> SEQUENCE: 13
187 ggcgcccacc atcgcgtcgc agcc                            24
189 <210> SEQ ID NO: 14
190 <211> LENGTH: 9
191 <212> TYPE: DNA
192 <213> ORGANISM: Unknown
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Oligonucleotide
197 <400> SEQUENCE: 14
198 gtgggcgcc                                              9
```

RAW SEQUENCE LISTING   DATE: 09/17/2004
PATENT APPLICATION: US/10/656,531B   TIME: 15:49:44

Input Set : A:\CTCH-P01-016 SUB SEQ.TXT
Output Set: N:\CRF4\09172004\J656531B.raw

```
200 <210> SEQ ID NO: 15
201 <211> LENGTH: 9
202 <212> TYPE: DNA
203 <213> ORGANISM: Unknown
205 <220> FEATURE:
206 <223> OTHER INFORMATION: Oligonucleotide
208 <400> SEQUENCE: 15
209 gtcgcagcc                                                    9
211 <210> SEQ ID NO: 16
212 <211> LENGTH: 168
213 <212> TYPE: DNA
214 <213> ORGANISM: Unknown
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Oligonucleotide
219 <400> SEQUENCE: 16
220 actagcaacc tcaaacagac accatggtgc atctgactcc tgaggagaag tctgccgtta 60
221 ctgccctgtg gggcaaggtg aacgtgatcg ttggagtttg tctgtggtac cacgtagact 120
222 gaggactcct cttcagacgg caatgacggg acaccccgtt ccacttgc              168
224 <210> SEQ ID NO: 17
225 <211> LENGTH: 9
226 <212> TYPE: DNA
227 <213> ORGANISM: Unknown
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Oligonucleotide
232 <400> SEQUENCE: 17
233 gaggttgct                                                    9
235 <210> SEQ ID NO: 18
236 <211> LENGTH: 7
237 <212> TYPE: PRT
238 <213> ORGANISM: Unknown
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Synthetic zinc finger peptide
243 <400> SEQUENCE: 18
244 Gln Ser Ser Asp Leu Thr Arg
245 1               5
248 <210> SEQ ID NO: 19
249 <211> LENGTH: 7
250 <212> TYPE: PRT
251 <213> ORGANISM: Unknown
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Synthetic zinc finger peptide
256 <400> SEQUENCE: 19
257 Thr Ser Gly Glu Leu Val Arg
258 1               5
261 <210> SEQ ID NO: 20
262 <211> LENGTH: 7
263 <212> TYPE: PRT
264 <213> ORGANISM: Unknown
266 <220> FEATURE:
```

RAW SEQUENCE LISTING   DATE: 09/17/2004
PATENT APPLICATION: **US/10/656,531B**   TIME: 15:49:44

Input Set : **A:\CTCH-P01-016 SUB SEQ.TXT**
Output Set: **N:\CRF4\09172004\J656531B.raw**

```
267 <223> OTHER INFORMATION: Synthetic zinc finger peptide
269 <400> SEQUENCE: 20
270 Thr Ser Gly Ala Leu Thr Arg
271 1               5
274 <210> SEQ ID NO: 21
275 <211> LENGTH: 7
276 <212> TYPE: PRT
277 <213> ORGANISM: Unknown
279 <220> FEATURE:
280 <223> OTHER INFORMATION: Synthetic zinc finger peptide
282 <400> SEQUENCE: 21
283 Thr Ser Gly Ser Leu Thr Arg
284 1               5
287 <210> SEQ ID NO: 22
288 <211> LENGTH: 7
289 <212> TYPE: PRT
290 <213> ORGANISM: Unknown
292 <220> FEATURE:
293 <223> OTHER INFORMATION: Synthetic zinc finger peptide
295 <400> SEQUENCE: 22
296 Arg Ser Asp Asn Leu Thr Arg
297 1               5
300 <210> SEQ ID NO: 23
301 <211> LENGTH: 7
302 <212> TYPE: PRT
303 <213> ORGANISM: Unknown
305 <220> FEATURE:
306 <223> OTHER INFORMATION: Synthetic zinc finger peptide
308 <400> SEQUENCE: 23
309 Arg Ser Asp Asn Leu Val Arg
310 1               5
313 <210> SEQ ID NO: 24
314 <211> LENGTH: 48
315 <212> TYPE: DNA
316 <213> ORGANISM: Unknown
318 <220> FEATURE:
319 <223> OTHER INFORMATION: Oligonucleotide
321 <400> SEQUENCE: 24
322 agcaacctct ctagagcgtg ggcgtcgttg gagagatctc gcacccgc          48
324 <210> SEQ ID NO: 25
325 <211> LENGTH: 9
326 <212> TYPE: DNA
327 <213> ORGANISM: Unknown
329 <220> FEATURE:
330 <223> OTHER INFORMATION: Oligonucleotide
332 <400> SEQUENCE: 25
333 ggcaaggtg                                                    9
335 <210> SEQ ID NO: 26
336 <211> LENGTH: 7
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/17/2004
PATENT APPLICATION: US/10/656,531B   TIME: 15:49:45

Input Set : **A:\CTCH-P01-016 SUB SEQ.TXT**
Output Set: **N:\CRF4\09172004\J656531B.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 5,6,7,8,9,10
Seq#:6; N Pos. 2,3,5,6,8,9,
Seq#:7; N Pos. 1,2,4,5,7,8,10,11,12,13,14,15,17,18,20,21,23,24

VERIFICATION SUMMARY DATE: 09/17/2004
PATENT APPLICATION: **US/10/656,531B** TIME: 15:49:45

Input Set : **A:\CTCH-P01-016 SUB SEQ.TXT**
Output Set: **N:\CRF4\09172004\J656531B.raw**

```
L:80 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:84 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:5
L:85 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:95 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:99 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:6
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:116 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:120 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
```